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JUN 0 5 2003



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of: Geoffrey B. Rhoads

Patent No. 6,546,112

Application No.: 09/198,022

Filed: November 23, 1998

For:

SECURITY DOCUMENT

STEGANOGRAPHICALLY-ENCODED

AUTHENTICATION DATA

Examiner: Andrew Johns

Date: June 2, 2003

Art Unit: 2621

Issued April 8, 2003

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on June 2, 2003, as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O., BOX 1450/MEXANDRIA, VA 22313-1450/

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William Y. Conwell-Attorney for Applicant

REQUEST FOR CERTIFICATE OF CORRECTION

Mail Stop Certificate of Correction Branch COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450 Certificate

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of Correction

In proofreading the above original Letters Patent with the file copy of the application (including the Examiner's instructions concerning claim renumbering), the following errors were noted in the printing of the patent:

In the Claims

Column 8, lines 53-56, change "13. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is redundant with at least some of said human-readable information." to

--13. A method of producing a photo identification document, the document being characterized by steganographic encoding representing multi-bit data, said multi-bit data being computer-discernable from analysis of visible light scan data, but the existence of said encoded data not being evident to human observers of the document, the steganographic encoding including: providing the multi-bit data and at least one noise signal to a computing device;

receiving from said computing device a noise-like output signal; and additively applying the noise-like output signal to the document.--

Column 8, line 57-61, change claim "14. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information." to

-14. The method of claim 13 in which the encoding is locally scaled in amplitude in accordance with visible features on the document.--

Column 8, lines 62-64, change claim "15. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon." to

--15. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data corresponds to at least a part of said printed text.--.

Column 9, lines 1-3, change claim "17. The method of claim 16 in which the encoding is locally scaled in amplitude in accordance with visible features on the document." to

--17. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data is useful in cooperation with at least part of said printed text to verify authenticity of the document.--

Column 10, lines 1-3, change claim "27. The method of claim 16, further characterized by encoding a calibration signal in the photo, said calibration signal aiding the later decoding of the multi-bit data." to

--27. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is redundant with at least some of said human-readable information.--

Column 10, lines 4-5, change claim "28. The method of claim 27 in which the calibration signal is not apparent to human observers of the document." to

--28. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information.--

Column 10, lines 6-8, change claim "29. The method of claim 16 in which said encoding encompasses regions of the document distinct from any text or photo thereon." to

--29. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon.--

After correction, claims 13-29 of the patent should read as follows:

13. A method of producing a photo identification document, the document being characterized by steganographic encoding representing multi-bit data, said multi-bit data being computer-discernable from analysis of visible light scan data, but the existence of said encoded data not being evident to human observers of the document, the steganographic encoding including: providing the multi-bit data and at least one noise signal to a computing device; receiving from said computing device a noise-like output signal; and additively applying the noise-like output signal to the document.

- 14. The method of claim 13 in which the encoding is locally scaled in amplitude in accordance with visible features on the document.
- 15. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data corresponds to at least a part of said printed text.
- 16. The method of claim 13 wherein the multi-bit data comprises an index into a registry containing additional information.
- 17. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data is useful in cooperation with at least part of said printed text to verify authenticity of the document.
- 18. The method of claim 13 wherein the photo identification document comprises a plastic document.
- 19. The method of claim 13 wherein the photo identification document comprises a driver's license.

20. The method of claim 13 wherein some regions of the document are not steganographically encoded.

- 21. The method of claim 13 wherein the encoding slightly changes a visible image on the document to encode the multi-bit data therein, the changes being adjusted in accordance with local characteristics of the visible image so as to avoid impairing the aesthetics thereof.
- 22. The method of claim 13 in which each bit of the multi-bit data is encoded at plural locations across the document, but the encoding of each said bit takes different forms at different locations.
- 23. The method of claim 13 in which the encoding includes texturing a surface microtopology of the document to encode the plural binary bits therein.
- 24. The method of claim 13, further characterized by encoding a calibration signal in the photo, said calibration signal aiding the later decoding of the multi-bit data.
- 25. The method of claim 24 in which the calibration signal is not apparent to human observers of the document.
- 26. The method of claim 13 in which said encoding encompasses regions of the document distinct from any text or photo thereon.
- 27. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is redundant with at least some of said human-readable information.
- 28. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information.

29. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon.

All of the above errors are attributable to the Patent Office, and a Certificate of Correction is enclosed in duplicate to make formal notice of the errors in the subject patent.

Date: June 2, 2003

23735

Phone: 503-885-9699 FAX 503-885-9880 Respectfully submitted,

DIGIMARE CORPORATION

William Y. Conwell
Registration No. 31,943

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO

6,546,112

Page 1 of 8

DATED

April 8, 2003

INVENTOR(S):

Geoffrey B. Rhoads

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

Column 8, lines 53-56, change "13. The photo identification document of claim 1 having humanreadable information formed thereon, and wherein the steganographic encoding represents data that is redundant with at least some of said human-readable information." to

--13. A method of producing a photo identification document, the document being characterized by steganographic encoding representing multi-bit data, said multi-bit data being computer-discernable from analysis of visible light scan data, but the existence of said encoded data not being evident to human observers of the document, the steganographic encoding including: providing the multi-bit data and at least one noise signal to a computing device;

receiving from said computing device a noise-like output signal; and additively applying the noise-like output signal to the document .--

Column 8, line 57-61, change claim "14. The photo identification document of claim 1 having humanreadable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information." to

--14. The method of claim 13 in which the encoding is locally scaled in amplitude in accordance with visible features on the document .--

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William Y. Conwell **Digimarc Corporation** 19801 SW 72nd Ave., Suite 250 Tualatin, OR 97062

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Page 2 of 8

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April 8, 2003

DATED

Geoffrey B. Rhoads

INVENTOR(S):

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 8, lines 62-64, change claim "15. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon." to

--15. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data corresponds to at least a part of said printed text.--.

Column 9, lines 1-3, change claim "17. The method of claim 16 in which the encoding is locally scaled in amplitude in accordance with visible features on the document." to

--17. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data is useful in cooperation with at least part of said printed text to verify authenticity of the document.--

Column 10, lines 1-3, change claim "27. The method of claim 16, further characterized by encoding a calibration signal in the photo, said calibration signal aiding the later decoding of the multi-bit data." to

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Page 3 of 8

DATED

April 8, 2003

Geoffrey B. Rhoads

INVENTOR(S):

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 10, lines 4-5, change claim "28. The method of claim 27 in which the calibration signal is not apparent to human observers of the document." to

--28. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information.--

Column 10, lines 6-8, change claim "29. The method of claim 16 in which said encoding encompasses regions of the document distinct from any text or photo thereon." to

--29. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon.--

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Page 4 of 8

DATED

April 8, 2003

INVENTOR(S) :

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

After correction, claims 13-29 of the patent should read as follows:

13. A method of producing a photo identification document, the document being characterized by steganographic encoding representing multi-bit data, said multi-bit data being computer-discernable from analysis of visible light scan data, but the existence of said encoded data not being evident to human observers of the document, the steganographic encoding including: providing the multi-bit data and at least one noise signal to a computing device;

receiving from said computing device a noise-like output signal; and additively applying the noise-like output signal to the document.

14. The method of claim 13 in which the encoding is locally scaled in amplitude in accordance with visible features on the document.

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6,546,112

Page 5 of 8

DATED

April 8, 2003

INVENTOR(S) :

Geoffrey B. Rhoads

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 15. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data corresponds to at least a part of said printed text.
- 16. The method of claim 13 wherein the multi-bit data comprises an index into a registry containing additional information.
- 17. The method of claim 13 in which the photo identification document includes printed text, and the multi-bit data is useful in cooperation with at least part of said printed text to verify authenticity of the document.
- 18. The method of claim 13 wherein the photo identification document comprises a plastic document.
- 19. The method of claim 13 wherein the photo identification document comprises a driver's license.

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PATENT	NO

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Page 6 of 8

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April 8, 2003

INVENTOR(S) :

Geoffrey B. Rhoads

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 20. The method of claim 13 wherein some regions of the document are not steganographically encoded.
- 21. The method of claim 13 wherein the encoding slightly changes a visible image on the document to encode the multi-bit data therein, the changes being adjusted in accordance with local characteristics of the visible image so as to avoid impairing the aesthetics thereof.
- 22. The method of claim 13 in which each bit of the multi-bit data is encoded at plural locations across the document, but the encoding of each said bit takes different forms at different locations.
- 23. The method of claim 13 in which the encoding includes texturing a surface microtopology of the document to encode the plural binary bits therein.

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6,546,112

Page 7 of 8

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DATED

April 8, 2003

INVENTOR(S) :

Geoffrey B. Rhoads

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 24. The method of claim 13, further characterized by encoding a calibration signal in the photo, said calibration signal aiding the later decoding of the multi-bit data.
- 25. The method of claim 24 in which the calibration signal is not apparent to human observers of the document.
- 26. The method of claim 13 in which said encoding encompasses regions of the document distinct from any text or photo thereon.
- 27. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is redundant with at least some of said human-readable information.

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April 8, 2003

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Geoffrey B. Rhoads

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 28. The photo identification document of claim 1 having human-readable information formed thereon, and wherein the steganographic encoding represents data that is correlated with, but not redundant of, the human-readable information.
- 29. The photo identification document of claim 1 having both human-readable information and a barcode formed thereon.

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